

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A communication device comprising:

a master microprocessor;

a security identity module operably connected to the master microprocessor through a bus;

a buffering device operable to communicate with said master microprocessor,

wherein said master microprocessor is operable to receive messages from the buffering device or the security identity module.
2. (original): A communication device as set forth in claim 1, further comprising: a message entry device operable to provide said buffering device with a free-hand drawn message entered by a user with said message entry device.
3. (original): A communication device as set forth in claim 1, further comprising: a character recognition device operable to recognize handwritten characters provided in said messages and convert the hand written characters into text.
4. (original): A communication device as set forth in claim 1, wherein said buffering device comprises:

a quantizer operable to transform each of said messages into a collection of quantized messages.

5. (original): A communication device as set forth in claim 4, wherein said buffering device further comprises:

a memory module operable to store said messages; and
an encoder operable to encode said messages prior to transmitting them.

6. (original): A communication device as set forth in claim 1, wherein said bus is defined by GSM standard 11.11.

7. (original): A communication device as set forth in claim 1, wherein said buffering device is operably connected to said bus between the master microprocessor and the security identity module.

8. (original): A communication device as set forth in claim 1, wherein said communication device is compatible with GSM (Global System for Mobil Communication) standards.

9. (original): A communication device as set forth in claim 1, wherein said communication device is a GSM telephone.

10. (original): A communication device as set forth in claim 1, wherein said communication device is a PDA (Personal Digital Assistant).

11. (original): A communication device as set forth in claim 1, wherein said communication device is a wireless device.

12. (original): A communication device as set forth in claim 5, wherein said buffering device further comprises:

a decoder operable to decode received messages.

13. (original): A communication device as set forth in claim 2, wherein said message entry device comprises:

a free-hand writing area in which said free-hand drawn message can be entered.

14. (original): A communication device as set forth in claim 13, wherein said message entry device further comprises:

a create portion operable to place said communication device in a freehand message entry mode when activated; and

a save portion operable to store said free-hand drawn message into said buffering device.

15. (original): A communication device as set forth in claim 2, wherein said freehand drawn messages comprise handwritten text, hand-drawn pictures, or both.

16. (original): A communication device as set forth in claim 15, wherein said message entry device comprises:

a text included portion operable to notify the master microprocessor that an optical character recognition function should be performed on the free-hand drawn message; and

a language portion operable to notify the master microprocessor that the optical character recognition facility to be performed is different than a default language associated with the communication device.

17. (original): A GSM compatible communication device comprising:

a master microprocessor;

a security identity module operably connected to the master microprocessor through a bus, said security identity module comprising a memory portion and a slave microprocessor; and

a buffering device operable to communicate with said master microprocessor and said slave microprocessor,

wherein said buffering device is further operable to receive standard SMS messages input using a keypad on the communication device and free-hand created messages input using a free-hand compatible data entry device.

18. (original): A GSM compatible communication device as set forth in claim 17, wherein said free-hand created messages can be transmitted as an SMS message, a facsimile message or an e-mail message.

19. (original): A method for creating and sending SMS messages, said method comprising:

inputting a free-hand message to a GSM compatible communication device;

storing said free-hand message in a buffering device within said GSM compatible communication device;

processing said free-hand message to be compatible with standard SMS message standards; and

transmitting the processed free-hand message.

20. (original): A method for creating and sending SMS messages as set forth in claim 19, said method further comprising:

performing optical character recognition on said free-hand message.

21. (original): A method for creating and sending SMS messages as set forth in claim 19, said method further comprising:

determining whether an SMS message being entered into said GSM compatible communication device is a standard SMS message or a free-hand 5 drawn SMS message; and processing said SMS message being entered with said buffering device if it is determined that said SMS message is a free-hand drawn message.

22. (original): A method for creating and sending an SMS message from a GSM compatible communication device, said method comprising:

activating a message create function on said communication device, wherein said message create function is associated with a free-hand drawn message input device; entering a free-hand drawn message using said free-hand drawn message input device; activating a message ready function on said communication device indicating that message entry is complete; storing the free-hand drawn message in a buffering device; and quantizing the stored message into a set of sub-messages each with a predetermined maximum size.

23. (original): A method as set forth in claim 22, further comprising: indicating whether the free-hand drawn message entered using said freehand drawn message input device contains text; and performing optical character recognition on said entered message if said entered message contains text.

24. (original): A method as set forth in claim 23, wherein said optical character recognition is performed within said GSM compatible communication device.

25. (original): A method as set forth in claim 23, wherein said optical character recognition is performed within a network server external from said GSM compatible communication device.

26. (original): A method as set forth in claim 23, further comprising:
if the free-hand drawn message includes text, indicating a language associated with the text;
performing said optical character recognition on said text in the language indicated.

27. (original): A method as set forth in claim 22, further comprising encoding said quantized message.

28. (original): A method as set forth in claim 27, further comprising:
sending said encoded free-hand message from said communications device to a messaging service center;
relaying the encoded free-hand message from said messaging service center to a free-hand messaging server;
decoding said encoded free-hand message; and
forwarding said decoded free-hand message from said free-hand messaging server to said messaging service center; and
forwarding said decoded free-hand message from said messaging service center to an intended recipient.

29. (original): A method for receiving an SMS message from a communication device, said method comprising:

receiving an encoded free-hand drawn SMS message from a free-hand messaging server;
transferring said encoded free-hand drawn SMS message to a buffering
device operably connected to a microprocessor and a security identity module;
decoding said encoded free-hand drawn SMS message in said buffering
device.

30. (original): An SMS message transmission system comprising:
a plurality of user devices capable of sending and/or receiving SMS messages;
at least one base station operable to receive SMS messages from said user devices;
a network connected to the one or more base stations operable to process free-hand drawn
SMS message sent from a sender user device and route the free hand drawn SMS message to an
intended recipient user device.

31. (original): An SMS message transmission system as set forth in claim 30, wherein
said network comprises:

a mobile switching center;
a short message service center operable to process standard SMS
messages; and
a free-hand messaging server operable to process SMS messages created
using free-hand drawing or writing.

32. (original): An SMS message transmission system as set forth in claim 31, wherein
said free-hand messaging server comprises an OCR portion operable to perform optical character
recognition on said free-hand drawn SMS messages.

33. (original): An SMS message transmission system as set forth in claim 31, wherein said free-hand messaging server comprises:

a short message service center interface portion operable to interface said free-hand messaging server with said short message service center;

a concatenation module operable to concatenate said free-hand drawn SMS messages into messages having a predetermined maximum length; and

a decoding module operable to decode said free-hand drawn SMS messages.

34. (currently amended): A communication device comprising:

a data entry device operable to enter a free-hand drawn message;

a first conversion device operable to convert said free-hand drawn message into a message of a different format; and

a quantizer operable to divide said free-hand drawn message into a plurality of sub messages.

35. (original): An SMS message transmission system as set forth in claim 33, further comprising a signature authentication module operable to receive and store baseline user signatures and use the stored baseline signatures to authenticate signatures presented over the network.

36. (original): A method for providing a digital signature, said method comprising:
entering a baseline signature on a mobile device using a free-hand drawn SMS the
baseline signature on a free-hand signature server;

authenticating a subsequent signature received by said free-hand signature server by determining whether said subsequent signature was drawn by the mobile user who entered the baseline signature.

37. (original): A method as claimed in claim 36, further comprising:
having said mobile user enter a previously provided code to identify the baseline signature with the mobile user.

38. (cancelled):

39. (original): A device as claimed in claim 34 further comprising:
a second conversion device operable to convert text portions of said freehand drawn message into ASCII characters.

40. (original): A device as claimed in claim 39 wherein said second conversion device is further operable to receive a language command from said data entry device and further convert said free-hand drawn message into a language corresponding to said language command.

41. (original): A device as claimed in claim 34, wherein said communication device is a GSM compatible device and said first conversion device is located within said GSM compatible device.

42. (original): A device as claimed in claim 41, wherein said first conversion device is operably connected to a SIM connector, wherein said SIM connector complies with GSM standard 11.11.

43. (currently amended): A network server comprising:

an interface module operable to receive free-hand drawn messages from a short messaging service center; ~~[[and]]~~

a decoder operable to decode said free-hand drawn messages; and

a concatenation module operable to generate a full message from a plurality of concatenated free-hand drawn messages.

44. (cancelled)

45. (currently amended): A network server as claimed in claim 43~~[[44]]~~, further comprising:

a handwriting recognition module operable to convert said free-hand drawn messages into ASCII characters.

46. (original): A communication device as claimed in claim 34, wherein said different format is a standard SMS format.

47. (original): A message transmission system 31, wherein said free-hand messaging server comprises:

a short message service center interface portion operable to interface said

free-hand messaging server with said short message service center;

a concatenation module operable to concatenate said free-hand drawn

SMS messages into messages having a predetermined maximum length; and

a decoding module operable to decode said free-hand drawn SMS messages.

48. (original): A message transmission system comprising: a plurality of user devices capable of sending and/or receiving messages;

at least one base station operable to receive said messages from said user devices;

a network connected to the one or more base stations operable to process

free-hand drawn message sent from a sender user device and route the free-hand drawn message to an intended recipient user device; and

a signature authentication module operable to receive and store baseline user signatures and use the stored baseline signatures to authenticate signatures 10 presented over the network.

49. (currently amended): A communication device comprising:

a receiving portion operable to receive a message;

a first conversion device operable to convert said message into a freehand drawn message, and

wherein said message received by said receiving portion is a standard SMS message.

50. (cancelled)

51. (original): An message transmission system as claimed in claim 30 wherein said user devices comprise mobile devices and desktop computers.

52. (original): An message transmission system as claimed in claim 30 wherein said SMS messages are generated using a computer program.